

Response Under 37 CFR 1.116

Expedited Procedure

Examining Group 1734

Appl. No. 10/783,114

Amdt. dated July 24, 2006

Reply to Office Action of March 24, 2006

Attorney Docket No. 1217-040374

Amendments to the Drawings:

The attached sheet of drawings includes a change to Figure 1. Figure 1 has been amended to insert reference --R2-- for the take-up reel and to correctly locate the lead line for element 34.

Attachments: Replacement Sheet

Annotated Copy Showing Change

REMARKS

Information Disclosure Statement

Enclosed with this Amendment After Final Rejection is an Information Disclosure Statement citing one Japanese reference, namely, JP 2003-332392 (JP '392) which was cited in a corresponding Japanese Office Action dated June 19, 2006. The present claims as amended clearly patentably define over JP '392 when taken alone or in combination with the prior art of record.

Specification

Applicants have amended the specification to correct minor translational errors. No new matter has been added. Because of the numerous instances where the word "stripes" has been replaced with "strips", a substitute specification is submitted herewith along with a marked-up copy of the specification setting forth the changes made. Acceptance of the substitute specification is respectfully requested.

Figures

Fig. 1 in the drawings has been amended to correctly locate the lead line for element 34 so as to properly identify the guide member as well as to add the missing element number "R2" for the take-up reel.

Claims

Claims 1-46 are pending in the application, with claims 29-39 withdrawn from consideration by way of a restriction requirement and subsequent election. Claims 1-19 and 40-46 stand rejected. The Action is final.

Claims 1-4, 6-19 and 43-45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sadahiko (JP2001-345345) and United States Patent No. 4,960,234 to Focke.

Claims 5 and 46 stand rejected under 35 U.S.C. §103(a) over Sadahiko and Focke as applied to claims 1 and 4, and further in view of Hasegawa (JP2001-035891).

Independent claims 1, 2, 3 and 4 have been extensively amended to include therein a back tension roller, a drive gear, and a guide member. The guide member is defined in detail in the independent claims. More specifically, as shown in Figs. 4 and 5, the guide member 34 is located at the inspection station 20 for causing the cut strips T1 and T2 of film carrier tapes to run in parallel with each other and comprises side guide portions 38 and 40 formed on opposed transverse ends of the guide member to guide opposed outermost sides T3 and T4 of the parallel running strips of the film carrier tapes; a centrally located adjacent part guide portion 42a is positioned intermediate the side guide portions to guide adjacent innermost adjacent sides of the parallel running strips of the film carrier tapes, the side guide members further having undercut portions 44 and 46 defining underlying spaces beneath each transverse region between each of the outermost side guide portions and the centrally located adjacent part guide portion whereby only edge portions of the adjacent strips are engaged by the guide members at step portions 38a, 42 and 40a, and the surfaces of the underlying spaces 44, 46 do not contact a central region of the strips running parallel through the guide member, whereby interaction between the edge support provided by the guide member and the drive gear 32 and back

tension roller 30 eliminates a transverse curling of the strips and causes the strips of film carrier tapes to reside in a common plane so as to locate an entire transverse width of the strips in a common focal length for simultaneous viewing of the strips in the inspecting station.

Clearly, none of the prior art discloses a guide member as now defined in the independent claims. Indeed, none of the prior art includes an inspection station for simultaneously inspecting a plurality of parallel running strips of film carrier tapes. None of the prior art recognizes the problem encountered in slitting and inspecting multiple strips of film carrier tapes and the tendency of transverse curling of such tapes, which causes the tapes to rise in and out of a common focal plane. This makes simultaneous inspection very difficult. Applicants' invention overcomes this shortcoming by providing a guide member that supports the outer edges of the strips of slit film carrier tapes which, in combination with the interaction between the drive gear and the back tension roller, eliminates the transverse curling of the strips and causes the strips of film carrier tapes to reside in a common plane and, thus, in a common focal length for simultaneous viewing in the inspection station using the magnifying means. The guide member is defined in the independent claims as having undercut portions defining underlying spaces between each transverse region between each of the outermost side guide portions and the centrally located adjacent part guide portion so that only edge portions of the adjacent strips are engaged by the guide member and, further, the undercut portions defining the underlying spaces do not contact a central region of the strips, thus preventing any marring or scratching of the strips of film carrier tape. The undercut regions also ensure that

only the opposed edges of the strips of carrier tapes are supported in the guide member. As stated, this feature, along with the interaction of the drive gear and the back tension roller, causes the tape to flatten and eliminate the transverse curling of the strips. These features are fully supported in the written specification and drawings of the instant application.

The guide member as now defined in the independent claims 1-4 was partially defined in original claim 5, which has now been canceled. The feature of the guide portion of claim 5 was rejected by the Examiner as allegedly being taught by Hasegawa, as set forth in paragraph 6 on pages 5-6 of the Office Action of March 24, 2006. The Examiner stated that Hasegawa discloses side guide portions and protrude portion for mounting the electronic components, with an alleged solution involving alignment pins 26, 28, for example. The Examiner states that Hasegawa discloses that the structure enables accurate alignment of the tape for inspection. Therefore, according to the Examiner, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such guide structures in order to accurately align the tape.

The Examiner's reconsideration is respectfully requested. Clearly, Hasegawa does not disclose a guide member as now defined in the independent claims. The alignment pins 26 and 28 relied upon by the Examiner are used for aligning the TAB tape in a longitudinal direction. Hasegawa specifically discloses in paragraphs 32 and 33, and in Fig. 6, that the longitudinal direction gage pins 26 and 28 project up, and project in the sprocket hole S of the TAB tape. Specifically, the advance edges 26b and 28b of the gage pins 26 and 28 engage the advance edges

Response Under 37 CFR 1.116

Expedited Procedure

Examining Group 1734

Appl. No. 10/783,114

Amdt. dated July 24, 2006

Reply to Office Action of March 24, 2006

Attorney Docket No. 1217-040374

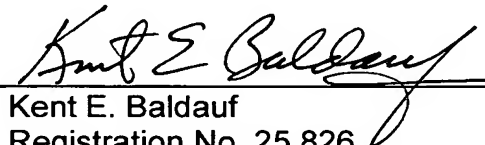
S3 and S4, respectively, of the sprocket holes S of the TAB tape, which is said to position the tape accurately in a longitudinal direction. Hence, the gage pins 26 and 28 or the other gage pins 46 and 48 are intended to project into the sprocket holes and do not perform the function of engaging the edges of the tape. Likewise, Hasegawa fails to disclose or suggest the undercut regions in the guide member now defined in the independent claims as well as edge support of the strips of carrier tapes. These features are, likewise, nowhere disclosed or suggested in either Sadahiko or in Focke. Accordingly, the pending claims clearly define patentable subject matter over the cited art. All of the dependent claims include these limitations and, accordingly, are also in allowable condition.

The Examiner's reconsideration and favorable action with respect to claims 1-4, 6-19, and 40-46 are respectfully requested.

Respectfully submitted,

THE WEBB LAW FIRM

By



Kent E. Baldauf

Registration No. 25,826

Attorney for Applicants

700 Koppers Building

436 Seventh Avenue

Pittsburgh, Pennsylvania 15219

Telephone: 412-471-8815

Facsimile: 412-471-4094

Fig. 1

